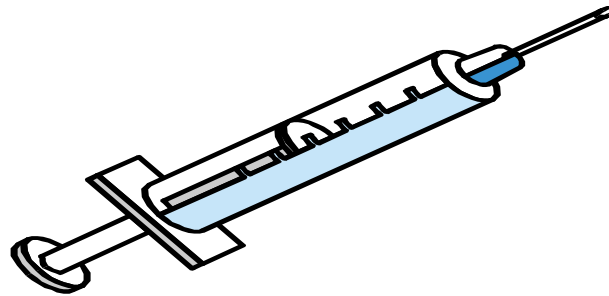


# Results of Influenza Vaccination Survey Among Maryland Health Care Workers, 1999



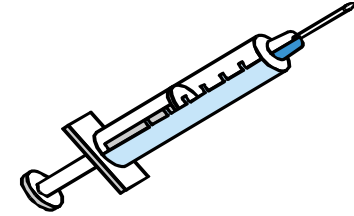
Leslie Edwards, MHS

Maryland Department of Health and Mental Hygiene

Department of Outbreak Investigation

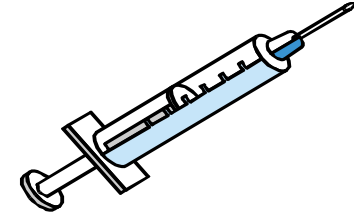
September 29, 2000

# 1999 Survey



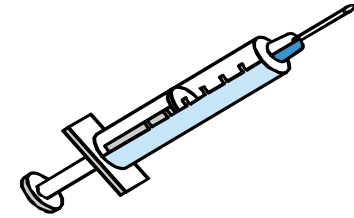
- 13 questions
  - 8 about history of receiving flu vaccine and reasons for and against getting vaccinated
  - 5 demographic questions
    - age
    - job title
    - education level
    - patient care work?
    - # of years worked

# Demographics



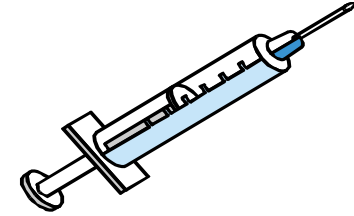
- Total # of surveys distributed= 1175
- Total # of respondents= 670
- **RESPONSE RATE=  $670/1175= 57\%$**
- Age (all respondents):
  - Mean= 45 years
  - Median = 46 years
  - Range= (14 - 74 years)

# Occupation of Respondents:



– Patient care	359 (56%)
– Administrative	180 (28%)
– Industrial, Maintenance	56 (9%)
– Food Service	22 (3%)
– Other	4 (4%)

## Education level of respondents:

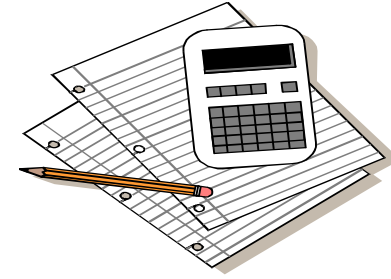


– Some high school	21	(3%)
– Finished high school	143	(23%)
– Some college	181	(29%)
– Finished college	179	(28%)
– Master's Degree	78	(12%)
– Ph.D. or M.D.	33	(5%)

# RESULTS

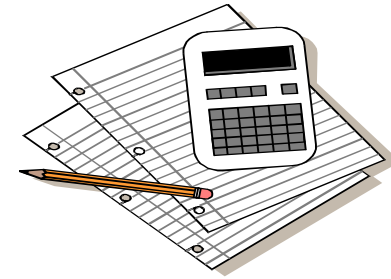


# Results



<u>Persons who got a flu shot in 1999:</u>	468(70%)
<u>Persons who got a flu shot in 1998:</u>	402 (62%)
<u>Overall change (1998 to 1999):</u>	+66 (8% increase)
<u>Age (vaccinated in 1999):</u>	Mean = 47 years Median = 48 yrs Range = 14-74 yrs
<u>Age (NOT vaccinated in 1999):</u>	Mean = 42 years Median = 42 yrs Range = 18 - 63 yrs

# Results

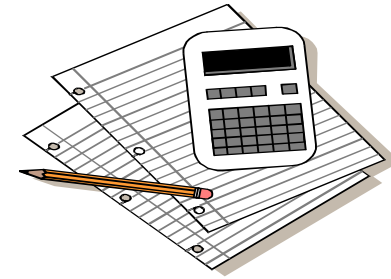


## Where were you vaccinated in 1999?:

Work	431	(92%)
Dr's office	25	(5%)
Health dept	1	(<1%)
Pharmacy	1	(<1%)
Other	10	(2%)



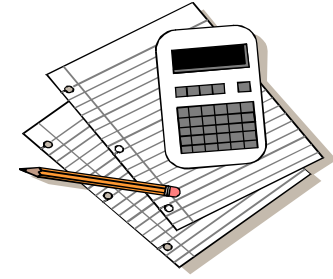
# Vaccination rate according to occupation group



\*See handout for table of results

**Conclusion: Occupation group was not at all associated with a higher rate of influenza vaccination (in other words, employees involved in patient care were no more likely to have gotten a flu shot than were employees who worked in administration, food-service, or other jobs within the facility).**

# Vaccination rate according to fast education level completed



\*See handout for table of results

**Conclusion: Higher education is, for the most part, associated with a higher influenza vaccination rate among survey respondents.**

# Vaccination rate according to whether or not flu shot was provided for free



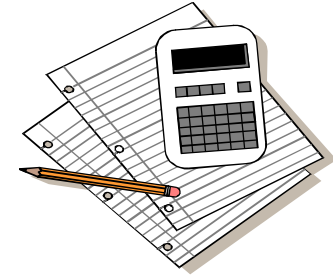
\*See handout for table of results

**Conclusion:** Employees who could get the influenza vaccine for free at work were roughly twice as likely (or 2.09 times as likely) to be vaccinated as were employees who had to pay for the shot

**OR= 2.09    CI=1.29 – 3.4    p-value<0.001**

▪

# Reasons why respondents were vaccinated in 1999, #1

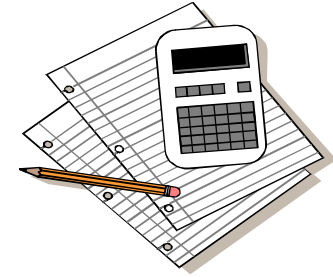


\*See handout for table of results

**Conclusion: Aproximatley 66% more of the patient care workers felt that they were at high risk to become infected with influenza than did other facility employees, and listed this as a reason for getting a flu shot in 1999**

Odds Ratio = 1.66    95% CI = 1.02 – 2.73    p= 0.03

# Reasons why respondents were vaccinated in 1999, #2



\*See handout for table of results

**Conclusion: Over twice as many patient care workers listed the desire to “protect patients at work” as a top reason for getting a flu shot in 1999**

Odds Ratio = 2.31    95%CI = 1.55 – 3.45     $p < 0.01$

# Reasons why respondents WERE NOT vaccinated in 1999

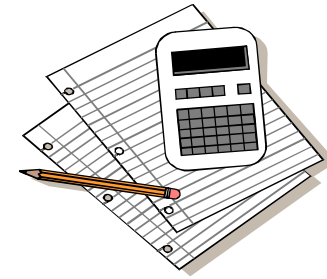


\*See handout for table of results

**Conclusion:** Half as many employees who work in patient care listed the “fear that getting the flu shot will give you the flu” as a top reason not be vaccinated as did employees who work in other areas besides patient care.

**Odds Ratio = 0.48    95% CI = 0.24 – 0.93                      p = 0.02**

Would any of these incentives make you more likely to get the flu shot next year if you didn't get it this year?



<u>Total number of respondents:</u>	<u>192</u>
Dr's presentation about flu at work	17 (10%)
Health dept. visitor talks about flu	9 (6%)
Mobile flu vax cart	15 (8%)
Lottery for 1 day vacation	22 (12%)
Lottery for gift certificate	24 (13%)
Free lunch for all vaccinated	18 (10%)
Other	26 (12%)

# OVERALL CONCLUSIONS OF SURVEY:



In this particular cohort, influenza vaccination coverage was high and employees involved in patient care were no more likely to receive the influenza vaccine than employees who work in administration, food-service, and all other jobs which do not involve patient care.



# OVERALL CONCLUSIONS OF SURVEY:



Higher rates of vaccination were noted among respondents with a higher education level.



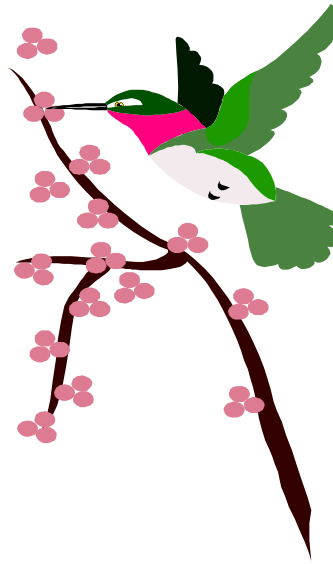
The survey results indicate the need for education among ALL facility employees regarding the importance of being vaccinated each year against influenza and the side effects associated with the vaccine.

# OVERALL CONCLUSIONS OF SURVEY:



Even the nominal cost of the vaccine may be a barrier against influenza vaccination for some employees. Consider providing the vaccine for free for all facility employees.

Good luck with your flu  
vaccination campaign this year!



*Any questions?*